

REMARKS

Claims 1, 2, 4, 5 and 7 are pending in the Application. Claims 8-13 which are directed to a non-elected invention have been canceled. Claims 8-13 will be the subject of a divisional application.

Applicants' claimed composite material has a resin base and metal which are hot-pressed to provide a binding strength between the resin base and metal of 5 N/cm or greater. Conventional electroless metal deposits typically have a binding strength of < 1 N/cm between the resin base and the metal. See the Specification at page 6, paragraph [0018], last sentence. "Hot-pressed" refers to a resin base and metal that are subjected to both heat and *pressure* for a period of time, where the pressure is greater than atmospheric. See the Specification at page 15, last 3 lines, and paragraph [0049] on page 16.

Claims 1, 2, 4, 5 and 7 have been rejected under 35 USC § 103(a) as being unpatentable over Hsi-Lin (US 3,561,995) in view of Chen et al. (US 5,989,653). Applicants respectfully traverse.

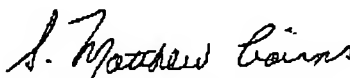
The Hsi-Lin patent is directed to a method of plating on polymeric materials. This patent fails to teach or suggest that the binding strength of the metal layer to the polymeric material can be improved by hot-pressing. Specifically, this patent fails to mention an improvement in binding strength between a resin base and a metal due to heating, pressure or a combination of heat and pressure.

Chen et al. are directed to a process of additive metallization of a substrate including the step of forming metallic clusters on the substrate using electromagnetic radiation. This reference has been cited for teaching heating the substrate after electroless plating to "increase adhesion of the metallization to the substrate." See column 5, lines 39-53. However, this patent neither teaches nor suggests the use of pressure, which is required by Applicants' hot-*pressing* step. Further, nothing in this patent teaches or suggests that such electroless metal deposits could withstand high temperatures *and pressures* used in Applicants' hot pressing step. Still further, the Chen patent neither teaches nor suggests that pressure in combination with higher temperatures can provide a composite material having a resin base-metal binding strength that is  $\geq$  five-times that obtained from conventional electroless metal plating of a resin base.

Even if one combined these references, there is nothing in this combination that teaches or suggests a composite material having a resin base-metal binding strength of 5 N/cm or greater, or that such a binding strength results from a step of hot-pressing, which uses both heat *and* pressure. Accordingly, Applicants submit that the Examiner has not made out a prima facie case of obviousness and respectfully request that this rejection be withdrawn.

Applicants respectfully request favorable reconsideration in the form of a notice of allowance.

Respectfully submitted,



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